ADAPTIVE SEEK CONTROL FOR MAXIMUM PERFORMANCE WITH MINIMAL FILTER CORRUPTION

Abstract of the Disclosure

By dynamically adjusting the maximum voice coil motor driving current produced by an amplifier in a disc drive, amplifier saturation may be reduced, while still maintaining optimal current to quickly drive the voice coil motor during seek operations. Reducing disc drive saturation, and thus non-linearities in the driving current, increases notch filter performance. As the notch filter is used in the disc drive to remove frequencies from the driving current that tend to cause or excite the mechanical oscillations in the disc drive, increased notch filter performance reduces mechanical oscillations and improves disc drive noise characteristics.

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